

b2
3. (Amended) The polynucleotide of claim 1, which encodes amino residues 155-164 of SEQ ID NO: 2 and hybridizes under stringent wash conditions of at least 65°C., less than about 150 mM salt to the complement of:

- a) the open reading frame of SEQ ID NO: 1; or
b) the open reading frame of SEQ ID NO: 3.

34
4. (Twice Amended) An isolated or recombinant polynucleotide encoding an antigenic polypeptide comprising at least 67 contiguous nucleotides of a coding portion of SEQ ID NO: 3, wherein said contiguous nucleotides are from nucleotides 580-670 of SEQ ID NO: 3.

b3
10. (Twice Amended) Said polynucleotide of claim 1c), wherein said contiguous amino acids number 35, or 40.

b4
16. (Amended) The polynucleotide of claim 2, wherein said polynucleotide:

- a) encodes a polypeptide with a natural sequence of the mature coding portion of SEQ ID NO: 2 or 4;
b) is isolated from nature;
c) encodes a polypeptide comprising five or fewer conservative substitutions from a natural sequence of SEQ ID NO: 2 or 4; or
d) encodes a polypeptide comprising five or fewer conservative substitutions from a natural sequence of SEQ ID NO: 4.

17. (Amended) The polynucleotide of claim 3, which:

- a) is attached to a solid substrate;
b) is detectably labeled;
c) is in a sterile composition;